Buck Perry is considered the grand-daddy of the concept of "Structure Fishing" having coined this term during the 1950's. He's the first fisherman to describe the use of underwater features to locate fish. These ideas incorporated below use his concepts to help identify these structural locations.

The home of the fish is deep water, where the fish are dormant and very difficult to catch. Periodically, the fish becomes active, and move toward the shallows (food source) using underwater structure as a guide. These bottom features, which go all the way from the deep water to the shallow water, act as submerged highways for the fish during their movement. If we desire to catch fish consistently, we must be able to use these structural features as a guide to the location of the fish.

During migration on structure, the fish will stop and hesitate at breaks and breaklines located on structure. We must identify these breaks and breaklines to pinpoint the exact location of the fish. We then present our lures on structure at the correct depth and speed to catch the fish. How far the fish migrate toward the shallows and how long they stay there is dependent on weather and water conditions.
Definitions

Breaks - Objects found on the lake bottom.

Breakline - An imaginary line on the lake bottom created from a sudden increase or decrease in depth; An abrupt contrast in the underwater conditions (i.e.: weedline, thermocline, shadeline, water color change, etc.)

Channel - The submerged riverbed; A type of structure used by fish during migration.

Contact Point - The point at which the fish make first contact with the structure when they start their migration.

Deep Water - 30 ft. deep or deeper; the deepest water in the immediate area, usually the channel; the home of the fish.

Drop Off - A breakline or structure where there is a sudden drop into the deepest water.

Feeder Creek - A submerged gulch, creek, or wash that feeds into the main channel; Structure that fish use during their migration from deep water to shallow water.

Flat - An area of the lake bottom that contains no structure.

Food Source - An area of the lake that contains food for the fish; Usually an area having either an inlet with running water, a weed flat, rock reef, or a rip-rap, manmade structure.

Hump - An underwater island; A structure in which the lake bottom rises up from the surrounding area.

Migration - A movement of the fish from deep water to shallow water along certain underwater paths.

Migration Route - The actual structure or breakline the fish use during their migration from deep water to the shallows.

Point Bar - A type of underwater structure in which the shallow water protrudes out into the lake more than the surrounding area.

Ridge - A type of structure where a long narrow hump exists along the sides of a channel or feeder creek; A levee.

Rip-Rap - Large rocks placed by man along the sides of dams and roadways to prevent erosion.

Rock Reef - A type of structure in which the bottom is covered by rock and rubble; A potential food source if found shallow.

Saddle - A type of structure which is formed from two inside bends facing opposite directions.

Sanctuary - An area in deep water where the fish are in a neutral or inactive state; The home of the fish.

Shallow Water - Water with a depth of 10 feet or less.

Shallows - An area containing shallow water.

Steep Deep - An area void of structure, which contains very little shallow water due to steep shoreline, drop off conditions.

Structure - A lake bottom feature that is distinctly different from the surrounding area.

Thermocline - A horizontal plane of rapidly changing water temperature.

Weedline (upper) - A line created from the contrast of weed growing to the waters' surface and weed which isn't growing to the surface.

Weedline (lower) - A line created on the lake bottom where the weed stops growing due to depths too great for the weed to grow.
I. Fish Seek Food & Saftey

For consistent fishing success, we must find these two conditions in or lake and present our lures or bait in these areas. Our fishing strategy consists of three key steps, next.

II. Fishing Strategy - Three Steps to finding fish:

1. Find the Food Sources
2. Find the Deeper Water (Safety) & other safety features for the fish.
3. Find the structure connecting the food with the deeper water

III. Types of Food Sources:

1. Running water inlet
2. Weeds Beds
3. Rock Reef
4. Large areas of shallow water where light can penetrate to the bottom of the lake.
5. Areas of submerged Timber & Brush in shallow water (less than 15’ deep)

IV. Deeper Water - Why Important?

1. Provides safety from surface predators.
2. Provides water temperature stability - no rapidly fluctuating temperatures.
3. Provides stable light conditions for the fish.

V. Other safety features the fish use:

1. Weed Beds - Provide cover for the fish in shallow water.
2. Submerged Brush & Trees - Provide cover for the fish in shallow water.
3. Rock Reefs - Provide cover for the fish in shallow water if spaces between rocks are large enough.

VI. Identify the Structure connecting the deeper water (safety) to the food source:

1. Poit Bar
2. Channels, Feeder Creeks, & Washes.
3. Underwater Hump (Submerged Island)
4. Rock Reef
5. Man-Made Structure (Submerged Roadbeds; Dams, etc.)
MIGRATION THEORY
OF FISH

The home of the fish is deep water, where the fish are dormant and very difficult to catch. Periodically the fish become active and move toward the shallows (food source) using underwater structure as a guide. These bottom features, which go all the way from the deep water to the shallow water, act as submerged highways for the fish during their movement.

Example of fish migration: Point Bar Structure-
Top View - Fish: All Trout
**STEP 2:** Fish become active and migrate to the 20 ft. breakline.

During migration on structure, the fish will stop or hesitate at breaks and breaklines located on structure.

**STEP 3:** Some fish continue to migrate to the lower weedline at 15 ft. deep. Some fish stay at the 20 ft. breakline.

How far the fish migrate toward the shallows and how long they stay is dependent on weather and water conditions plus the season.

**STEP 4:** The smaller fish continue to move to the upper weedline. The larger fish are afraid to move this shallow.

The fish have moved into the food source.

**STEP 5 & 6:** The fish scatter into the shallows by following the breaklines and weedlines along the sides of the structure.
**POINT BAR**

Requirements for a good Point Bar:

1. Point Bar goes all the way from the deep water to the shallow water.
2. Top of the Bar has large shallow water area with good food source.
3. Fish have immediate access to deep water.
4. Breakline into deep water (Drop Off) occurs at 15-30ft. deep.
5. Drop off plunges into submerged channel, which has Breaks.
6. Bar is Large with structural "fingers".
7. Drop off faces North. (shaded).

Point Bars are important to recognize:

1. Fish use Point Bars as a guide to go from deep water to shallow water.
2. Point Bars increase the area of shallow water.
3. Good Point Bars make the shallow food accessible to deep water.

---

**Point Bar Examples**

1. Poor Structure—violates all rules!

   - Top
   - Side A-A'
   - The flat interrupts the Bar!
   - No food source

2. Fair Structure—violates rules 2, 4, 5, 6!

   - B-B'
   - Weed line
   - Its not good when the fish sanctuary is a barren flat void of breaks.
   - Weed is food source
3 Good Structure—violates rules 6 & 7.

C - C'

Weed is food source

4. Excellent Structure—violates no rules.

Note the strong B.L. on the N.W. side of the Bar. When active, fish will migrate up this Breakline to the food source.

Legend:
- weed
- trees, brush
- weed
- fish migration
- depth
- channel
- fish (Trout)
- brush

Feeder creek and weed are food sources.
BREAKS & BREAKLINES

MAP LEGEND

1. Lake bottom line created from a sudden increase or decrease in depth.
2. Lower Weedline
3. Upper Weedline
4. Abrupt Water Color change
5. Line created from the edge of a series of Breaks.
6. Thermocline (Horizontal B.L.)
7. An abrupt current change

LEGEND

Top View
- Weed to Surface
- Brush, Trees
- Depth Contours
- Channel
- Feeder Creek
- Rock, Rubble
- Fish
- Fish Migration
- Submerged Weed
- Dirty Water
- Lake Shoreline

Side View

Requirements for good Breaklines:
1. Breakline is located on structure.
2. Lake bottom: Breakline drops sharply into deep water, preferably the channel.
3. Breakline has Breaks on it.
4. Numerous Breaklines merge at the same point (e.g., Drop Off B.L. + Thermocline + Lower Weedline)
5. Lake bottom B.L. drops at a depth of 15 to 40 ft. deep. (Deeper B.L.s hold fish, but lure presentation becomes difficult)

Fishing for Trout

The Inlet, Rock Reef, and Weeds are the food source areas for the fish.

Point G is the contact point of the entire Hump structure because the drop off from the 20 ft. B.L. is the steepest here and the B.L. is deeper here than the other Point Bar structures.

Fish sanctuary areas located at [3BP] in the channel.
Why Breaks and Breaklines are important:

Since the breaklines and structure are the actual migration routes of the fish, and Breaks offer "cover" and location identification for the fish, we must present the lure or bait directly over the Breaks and Breaklines on structure. If the Breakline is located 20ft. deep, we present the lure at 18 to 20ft. deep. When the fish are neutral or dormant, we present the lure or bait over their sanctuary in deep water. Trolling at the proper depth and speed is the fastest way to find the productive Breaks and Breaklines.
**POINT BAR**

Requirements for a good Point Bar:

1. Point Bar goes all the way from the deep water to the shallow water.
2. Top of the Bar has large shallow water area with good food source.
3. Fish have immediate access to deep water.
4. Breakline into deep water (Drop Off) occurs at 15-30ft. deep.
5. Drop off plunges into submerged channel, which has Breaks.
6. Bar is Large with structural "fingers".
7. Drop off faces North. (shaded).

Point Bars are important to recognize:

1. Fish use Point Bars as a guide to go from deep water to shallow water.
2. Point Bars increase the area of shallow water.
3. Good Point Bars make the shallow food accessible to deep water.

---

**Point Bar Examples**

1. Poor Structure—violates all rules!

   ![Diagram of poor structure](image)

   Top
   Side
   The flat interrupts the Bar!
   No food source

2. Fair Structure—violates rules 2, 4, 5, 6!

   ![Diagram of fair structure](image)

   It's not good when the fish sanctuary is a barren flat void of breaks.
   Weed is food source
3 Good Structure—violates rules 6 & 7.

C-C'

Weed is food source

4. Excellent Structure—violates no rules.

Note the strong B.L. on the N.W. side of the Bar. When active, fish will migrate up this Breakline to the food source.

D-D'

Contact Pt.

Legend:
- weed
- trees, brush
- weed
- fish migration
- depth
- channel
- fish (Trout)
- brush

Feeder creek and weed are food sources
CHANNEL

Requirements for good Channel structure:

1. Inlet has high water flow. (good food source)
2. Food Source adjacent to channel.
3. Channel has strong Breakline.
4. Feeder creeks enter channel.
5. Channel pulls in close to Point Bar, Hump, or Rock Reef.
6. There are breaks on the channel breakline.

Channels are important to identify:

1. The channel is a natural highway for the fish.
2. Channel goes all the way from the deep water to the shallows.
3. The channel is the deepest water in the area and is often the home for the fish.
4. The inlet is a food source, assuming water flow

Channel Examples

1. Fair Structure—violates req. nos. 2, 3, 4, 5, 6
   Note that channel has poor Breakline
   When active, fish will migrate up channel
   Channel inlet is food source.

2. Good Structure—violates req. nos. 4, 5, 6
   Note that channel has a strong Breakline 10ft. B.L.
   When active, fish migrate up channel B.L. to food source
   Inlet and weeds are the food sources
3. Very Good Structure—violates req. no. 4.

- Weedline
- BAR
- Breakline
- Channel

When active, fish migrate up channel or point bar to food sources.
HUMP

Requirements for good structure:

1. The Hump has immediate access to deep water.
2. Top of Hump is flat & shallow (food).
3. Hump is adjacent to channel or creek.
4. Hump has strong 15-30ft. breakline into deep water.
5. Top of the Hump is large & has breaks.
6. Point Bars run all the way from the top of the Hump to deep water.

Humps are important structure:

1. Humps can provide shallow food source.
2. Fish use Humps in defining their migration route.
3. Point Bars are often found with the Hump.

Examples

1. Poor Structure—violates all req.

2. Fair Structure—violates req. nos. 3, 4, 5, 6.

Note how the intersection of the feeder creek with the main channel has created the underwater hump.

Inlet and weed are food sources.
MAN MADE

Types of Man-Made Structure:

1. Submerged Roadbed (R.R or auto).
2. Roadways crossing the lake.
3. Dam.
4. Bulldozed areas.

Requirements for good Man-Made structure:

1. Goes all the way from deep water to the shallows, which has a food source.
2. Strong Breakline on the sides of the submerged roadbed.
3. Crosses the main channel.
4. Rip Rap covers the Man-Made structure.

![Diagram of Man-Made Structures](image-url)
3. Roadway crossing the lake—

4. Dam —

**Legend**
- **weed**
- **brush**
- **channel**
- **fish (Trout)**
- **depth**
- **feeder creek**
- **fish migration**
- **Rip Rap**
- **Bridge supports**

**Fish migrate up the corner of the dam to reach the shallows**

**Rip Rap does not go all the way to deep water**

**Rip Rap is source of food**
ROCK REEF

Types of Rock Reefs- (from poor to excellent):

2. Small rock of the same size-cobbler type. No spaces between rock.
3. Rock with undercuts & some rubble.
4. Rock Rubble - softball to Auto size. Excellent spaces between rocks.

Requirements fo Good Rock Reef Structure.

1. Rock rubble is found in large spaces between the rocks - Plenty of room for fish & small organisms to hide.
2. Rock Reef covers a large area of shallow water (less than 15' deep.)
3. Rock Reef is adjacent to deep water.

Rock Reefs are important to identify:

1. Rock Reefs, if found in shallow water, are potential food sources.
2. Fish use Rock Reefs for safety to hide from other predators.
3. Rock Reefs can provide a natural migration route from deep water to the shallow food sources.

ROCK REEF EXAMPLES

1. Poor Rock Reef - Violates rules 1 & 2 of requirements for good structure:

   Too Steep - Deep (No food shelf)
   No Rubble - Solid Rock
2. Fair Rock Reef - Violates rules 1 & 2:

Too Steep Deep - No Food Shelf
Poor Rock Rubble - No Large Spaces between the small rock

3. Good Rock Reef - Violates rule #2 of requirements for good structure

Good Rock Rubble
Steep Deep, hence small food shelf

4. Excellent Rock Reef - Violates no rules:

Large Food Shelf
Excellent Rock Rubble - Large Spaces between the rock